

K633632



JAN 21 2004

## Great Lakes Orthodontics, LTD.

*An Employee Owned Company*

*Our Vision*

*"Delight our customers. Respect and help our co-workers."*

### 510(k) SUMMARY

CONTACT PERSON: Mr. Mark Lauren      Great Lakes Orthodontics 800-828-7626  
[mllauren@greatlakesortho.com](mailto:mllauren@greatlakesortho.com)

DATE PREPARED: November 10, 2003

TRADE OR PROPRIETARY NAME: Variflex™

COMMON NAME: Dental acrylic, heat-softening acrylic

CLASSIFICATION NAME: Denture relining, repairing or rebasing resin 872.3760

PRODUCT CODE: EBI

PREDICATE DEVICE:    Clearsplint™    Astron Dental Corporation  
815 Oakwood Road Unit G  
Lake Zurich, IL 60047    800-323-4144

#### DEVICE DESCRIPTION

Variflex™ is a chemically cured soft dental acrylic. All components have been used in legally marketed devices or have been found to be safe for dental use.

#### INTENDED USE

Variflex™ is intended for the laboratory fabrication of dental appliances such as inter-occlusal splints and night guards.

#### TECHNOLOGICAL CHARACTERISTICS COMPARED WITH PREDICATE DEVICE

Variflex™ was evaluated as follows:

Mechanical properties, Hardness, Water absorption, Discoloration  
Variation of physical properties with temperature

Variflex™ was also evaluated as follows:

MEM Elution Test	non-cytotoxic
Mucous membrane irritation	non-irritant
Kligman Maximization Test (NaCl)	non-sensitizer

We conclude that the similarity in composition between Variflex™ and the predicate device, as well as the performance data and biocompatibility results, supports the safety and effectiveness of Variflex™ for the indicated uses.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

JAN 21 2004

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Mr. Mark Lauren  
Director of Research  
Great Lakes Orthodontics, Ltd.  
200 Cooper Avenue  
Tonawanda, New York 14151-511

Re: K033632

Trade/Device Name: Variflex™ Heat Softening Acrylic  
Regulation Number: 21 CFR 872.3760  
Regulation Name: Denture Relining, Repairing, or Rebasing Resin  
Regulatory Class: II  
Product Code: EBI  
Dated: November 17, 2003  
Received: December 01, 2003

Dear Mr. Lauren:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (301) 594-4613. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97) you may obtain. Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Chiu S. Lin', with a stylized flourish at the end.

Chiu S. Lin, PhD

Director

Division of Anesthesiology, General Hospital,

Infection Control and Dental Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known): K033632

Great Lakes Orthodontics  
200 Cooper Avenue  
Tonawanda, NY 14150

**Device Name:** Variflex™ heat softening acrylic

### Indications for Use:

Variflex™ is intended for the laboratory fabrication of dental appliances such as splints and night guards.

Prescription Use ✓  
(21 CFR Part 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR Part 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

Susan Runne  
(Division Sign-Off)  
Division of Anesthesiology, General Hospital,  
Infection Control, Dental Devices

510(k) Number: K033632

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